

# SEQUENCE LISTING

<110> Sasaki, Yukiko  
Nagano, Yukio  
Inaba, Takehito

<120> Light Repressible Promoter

<130> 46216

<140> US 09/700,187

<141> 2000-11-13

<150> PCT/JP00/01269

<151> 2000-3-03

<160> 40

<170> PatentIn ver. 2.0

<210> 1

<211> 12

<212> DNA

<213> Pisum sativum cv. Alaska

<220>

<223> Nucleotide sequence for a core region of light repressible promoter from the pea small GTPase gene

<400> 1  
ggatttttaca gt

12

<210> 2

<211> 93

<212> DNA

<213> Pisum sativum cv. Alaska

<220>

<223> Nucleotide sequence for a cis element of light repressible promoter from the pea small GTPase gene

<400> 2  
aaaagtaaca catattttga taaattttatt actaaaacta ttttctagta cttgttaatc 60  
atgtctgagg attttacagt aataaagaaa cga 93

<210> 3

<211> 2325

<212> DNA

<213> pisum sativum cv. Alaska

<220>

<223> Nucleotide sequence for a light repressible promoter from the  
pea small GTPase gene

<400> 3

aagcttttaa	ggcaagggaa	agacaacaat	tccaaaaata	taaaaactcc	taaagaatga	60
ttttattctt	atcttcataa	ataacttttc	ctattccaaa	aacacatcaa	agttatgtga	120
ttcatatctt	taattatctg	ataatatata	attgtatatt	caatatttca	tacaattgtg	180
ttatatgaaa	tattttgtag	gtaaaaggga	ctaagaataa	cctccgcaac	atcaaagtca	240
gaaacctctt	gtaactcttc	agttgaaacg	agaagggaag	ggacaacaca	gaaaactaag	300
ttccccct	taacttcttg	gtttgggtga	ggacttcctt	tacaatttat	actctaagga	360
aatacattag	acactctaga	tgggttgcac	tagctcatat	atttttaagt	aataataccc	420
acttcaagtt	ttttgttttt	tgttgttgtg	cagtagatga	taagatggat	catttctcaa	480
ggcccttatg	caaagacata	agatccatat	actccacca	gattgcttta	catctaacca	540
agttaatgaa	tttaaattct	tcgaaacaat	tatttcctac	caaagggaag	ttatatgcac	600
attttctaat	gtatttttat	atagaattga	tacatgtttc	tgttatacaa	gattagaatt	660
tggattttct	atccaaactc	ctacacttgg	tgagaaattt	cagcctcaac	ctcagtaa	720
caggttctct	cttcaaaact	atacacttgg	ttgagtgaga	attatggacg	tcaacctagc	780
aatatgaatc	cctctccaag	atcctacact	tatctgagtg	agaattttgg	tcctcgacct	840
caacaagata	gatttgatgg	gtcatcacga	ggggaagcat	tcacattggg	tcaaagattc	900
acccaaacaa	gtgagagaga	catcacatat	caacccaaac	cttaaggtga	taggtgtatg	960
agttctctta	cttataaagt	gctcaacctc	cacttttcta	agcaatgtgt	gacttagaac	1020
tcacacttat	ttctcaacat	aactcacact	tgtttatcaa	caatctcccc	cacaagtgtg	1080
agttcattcg	ctatgtcccc	ctcaagtgga	atctctttca	tcgcgatgct	tataccgttg	1140
ttgacatata	tctttactcg	tcatgggcac	ttcaatggga	cacgctgcct	gaccaccatg	1200
tcaagaagac	ttttgacaca	aggagtcggt	cccttactcg	aaccagactc	tgataccatt	1260
aatagatcac	tttgaatgga	tatcattcat	actatatcaa	acatttacgt	aaagataaaa	1320
aattcaccca	aacaaatgag	agagacacta	catctctctt	attatattaa	taaaatgtaa	1380
agaaaaatat	agtataaaaag	taacacatat	tttgataaat	ttattactaa	aactattttc	1440
tagtacttgt	taatcatgtc	tgaggatttt	acagtaataa	agaaacgagg	tagcccaaac	1500
aaaagtgata	attgtggagg	gtgtgatctt	tgtcggtgca	aaaaatgaaa	ccccaaactt	1560
gtgatattgt	gtcgactgct	ccgtcgctac	attgaaatta	atgaatgttc	ttttataacg	1620
tttgtctatg	ccgtattacc	catatggtca	ctagaatggg	acaatgaatt	taatatatat	1680
ctgtcatgtg	tgggtggatt	caattttaatt	gtatcgtaaa	tggtaggaca	tactcatgct	1740
acacaattat	atcatcactg	gtcaatcact	ggtcaatgtg	ttttctcttc	ccatgaattc	1800
acattgctaa	agaaaattac	caccttaaaa	tgtttatccc	ttgcacacat	ttcacatcaa	1860
tttattaaaa	cattttacca	ttggaaaaca	catacatatt	caatcaatta	tttttgcatt	1920
ttcaaaaact	aaaccaaaca	aacttagaat	attttgtaat	tatagcacia	ttttcaaaaa	1980
tatcctagtc	ttcaaccact	caataattca	caattttcaa	atcccttgca	aaacatcaca	2040
acctctagaa	actttgatta	ataatcta	aaaagcaata	atatgatata	taacaatat	2100
caccatatat	gttatgat	aatatgatgc	agcaatacac	ttaatttggg	aaagcattaa	2160
agcgagacaa	ctctattaac	accggttaatt	caacaaccgt	tgttgtcgag	ttcatgtttt	2220
cttccaactc	ttttcctttt	cctttacttt	atttattttc	cctacttacc	ttttctacta	2280
atatatacta	tctctcttga	acctcttttt	gatcttgaca	agaaa		2325

<210> 4

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer used in Example 1

<400> 4

acggttggtg aattaccggt gttaatagag 30

<210> 5

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> NcoI primer used in Example 3

<400> 5

ggtccatggt cttgtcaaga tc 22

<210> 6

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer used for preparing PL1 in Example 3

<400> 6

gggaagcttt aaaggcaagg g 21

<210> 7

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer used for preparing PL3 in Example 3

<400> 7

acgtaaagct taaaaattca ccc 23

<210> 8

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer used for preparing PL4 in Example 3

<400> 8

aaataaagct taaaagtaac acata 25

<210> 9  
 <211> 27  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> Primer used for preparing PL4B in Example 3  
 <400> 9  
 gtactgcagt cagacatgat taacaag 27  
 <210> 10  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> Primer used for preparing PL5 in Example 3  
 <400> 10  
 aaagaagctt ggtagcccaa acaa 24  
 <210> 11  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> Primer used for preparing LS1 in Example 3  
 <400> 11  
 aagcttctgc agggatttta cagtaataaa 30  
 <210> 12  
 <211> 35  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> Primer used for preparing LS2 in Example 3  
 <400> 12  
 aagcttgtct gactgcagta cagtaataaa gaaac

<210> 13  
 <211> 42  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> Primer used for preparing LS3 in Example 3  
 <400> 13  
 aagcttgtct gaggatttct gcagaataaa gaaacgaggt ag 42  
 <210> 14  
 <211> 48  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> Primer used for preparing LS4 in Example 3  
 <400> 14  
 aagcttgtct gaggatttta cagtctgcag gaaacgaggt agcccaaa 48  
 <210> 15  
 <211> 52  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> Primer used for preparing LS5 in Example 3  
 <400> 15  
 aagcttgtct gaggatttta cagtaataaa ctgcagaggt agcccaaaca ag 52  
 <210> 16  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> Primer used for preparing PL2 in Example 3  
 <400> 16  
 tcaatgggac acgctgcctg accaccatgt 30  
 <210> 17

<211> 31  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> pUC19 primer used in Example 3  
 <400> 17  
 ggcgtaatca tggatcatagc tggttcctgt g 31  
 <210> 18  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> Primer used for preparing PL6 in Example 3  
 <400> 18  
 tgatcggtgca aaaaatgaaa ccccaaactt 30  
 <210> 19  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> Primer used for preparing PL7 in Example 3  
 <400> 19  
 aatgtttatc ccttgacac atttcacatc 30  
 <210> 20  
 <211> 25  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> Primer used for preparing PL8 in Example 3  
 <400> 20  
 gcaaaacatc acaacctcta gaaac 25  
 <210> 21

<211>. 39

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer used for preparing PL4c in Example 3

<400> 21  
gtttggctgc agtcgtttct ttattactgt aaaatcctc 39

<210> 22

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer used for preparing PL4C in Example 3

<400> 22  
caatactgca gtatatgtta tgatataata tgatgcagc 39

<210> 23

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> gF primer used for preparing gF1 in Example 3

<400> 23  
tactgcagaa aagtaacaca tattt 25

<210> 24

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer used for preparing gF1 in Example 3

<400> 24  
tggtgatatt gtttagatat catattattg c 31

<210> 25

<211> 24

<212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> Primer used for preparing GF2 in Example 3  
 <400> 25  
 atgatatcca agggatttgg aaat 24  
 <210> 26  
 <211> 26  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> Primer used for preparing GF3 in Example 3  
 <400> 26  
 gtgatatcgg gataaacatt ttaagg 26  
 <210> 27  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> Primer used for preparing GF4 in Example 3  
 <400> 27  
 ttgatatccc gacaaagatc acac 24  
 <210> 28  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> Primer used for preparing gF5 in Example 3  
 <400> 28  
 gggatatctc gtttctttat tact 24  
 <210> 29  
 <211> 31



<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA WT1 used in Example 8

<400> 29

gtctgaggat ttacagtaa taaagaaacg a

31

<210> 30

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA WT2 used in Example 8

<400> 30

tcgtttcttt attactgtaa aatcctcaga c

31

<210> 31

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA MT1 used in Example 8

<400> 31

gtctgaggct tttcccgtaa taaagaaacg a

31

<210> 32

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA MT2 used in Example 8

<400> 32

tcgtttcttt attacgggaa aagcctcaga c

31

<210> 33

<211> 55

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer 35S46UP used in Example 9

<400> 33  
aagcttggat ccctcgagct gcaggatata gcaagaccct tcctctatat aagga 55

<210> 34

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer KZ35SDW used in Example 9

<400> 34  
ttccatggaa agctgcctag gagatcctct 30

<210> 35

<211> 54

<212> DNA

<213> Artificial Sequence

<220>

<223> Origonucleotide WT3 used in Example 9

<400> 35  
tgaggatttt acagtaattg aggattttac agtaattgag gattttacag taat 54

<210> 36

<211> 53

<212> DNA

<213> Artificial Sequence

<220>

<223> Origonucleotide WT4 used in Example 9

<400> 36  
attactgtaa aatcctcaat tactgtaaaa tcctcaatta ctgtaaaatc tca 53

<210> 37

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer 18X9RMDW used in Example 9

<400> 37

gcgatacctt ggatacctgag gatttt

26

<210> 38

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer 18X9RMUP used in Example 9

<400> 38

agcgcccgcc agtgtggata tcattactgt

30

<210> 39

<211> 54

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer MT3 used in Example 9

<400> 39

tgaggctttt cccgtaattg aggcttttcc cgtaattgag gcttttcccg taat

54

<210> 40

<211> 54

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer MT4 used in Example 9

<400> 40

attacgggaa aagcctcaat tacgggaaaa gcctcaatta cgggaaaagc ctca

54